```
            9          18          27          36          45          54
5' AGA ACG GTG AGG ATG ACC GAC GTA TAG GCG AGA GCC TAG GTA CGC CAT GCC AGG

           63          72          81          90          99         108
TCA CCG GTC CGG CAA TTC CCG GGT CGA CCC ACG CGT CCG CTT GGA GGG ACG CTG

          117         126         135         144         153         162
GGT TCA ACT TGA AGC CCT TCC ACA GAC ATT AAG TCG GTG AAA ACC ATT CAC TAG

          171         180         189         198         207         216
GAG AGG AGA AAC ACA ATG GCC ACC AAG ACA GAG TTG AGT CCC ACA GCA AGG GAG

          225         234         243         252         261         270
AGC AAG AAC GCA CAA GAT ATG CAA GTG GAT GAG ACA CTG ATC CCC AGG AAA GTT
                        M   Q   V   D   E   T   L   I   P   R   K   V

          279         288         297         306         315         324
CCA AGT TTA TGT TCT GCT CGC TAT GGA ATA GCC CTC GTC TTA CAT TTC TGC AAT
P   S   L   C   S   A   R   Y   G   I   A   L   V   L   H   F   C   N

          333         342         351         360         369         378
TTC ACA ACG ATA GCA CAA AAT GTC ATC ATG AAC ATC ACC ATG GTA GCC ATG GTC
F   T   T   I   A   Q   N   V   I   M   N   I   T   M   V   A   M   V

          387         396         405         414         423         432
AAC AGC ACA AGC CCT CAA TCC CAG CTC AAT GAT TCC TCT GAG GTG CTG CCT GTT
N   S   T   S   P   Q   S   Q   L   N   D   S   S   E   V   L   P   V

          441         450         459         468         477         486
GAC TCA TTT GGT GGC CTA AGT AAA GCC CCA AAG AGT CTT CCT GCA AAG TCC TCA
D   S   F   G   G   L   S   K   A   P   K   S   L   P   A   K   S   S

          495         504         513         522         531         540
ATA CTT GGG GGT CAG TTT GCA ATT TGG GAA AGG TGG GGC CCT CCA CAA GAA CGA
I   L   G   G   Q   F   A   I   W   E   R   W   G   P   P   Q   E   R

          549         558         567         576         585         594
AGC AGA CTC TGC AGC ATT GCT TTA TCA GGA ATG TTA CTG GGA TGC TTT ACT GCC
S   R   L   C   S   I   A   L   S   G   M   L   L   G   C   F   T   A

          603         612         621         630         639         648
ATC CTC ATA GGT GGC TTC ATT AGT GAA ACC CTT GGG TGG CCC TTT GTC TTC TAT
I   L   I   G   G   F   I   S   E   T   L   G   W   P   F   V   F   Y

          657         666         675         684         693         702
ATC TTT GGA GGT GTT GGC TGT GTC TGC TGC CTT CTC TGG TTT GTT GTG ATT TAT
I   F   G   G   V   G   C   V   C   C   L   L   W   F   V   V   I   Y
```

FIGURE 1A

```
          711         720         729         738         747         756
GAT GAC CCC GTT TCC TAT CCA TGG ATA AGC ACC TCA GAA AAA GAA TAC ATC ATA
D   D   P   V   S   Y   P   W   I   S   T   S   E   K   E   Y   I   I

          765         774         783         792         801         810
TCC TCC TTG AAA CAA CAG GTC GGG TCT TCT AAG CAG CCT CTT CCC ATC AAA GCT
S   S   L   K   Q   Q   V   G   S   S   K   Q   P   L   P   I   K   A

          819         828         837         846         855         864
ATG CTC AGA TCT CTA CCC ATT TGG TCC ATA TGT TTA GGC TGT TTC AGC CAT CAA
M   L   R   S   L   P   I   W   S   I   C   L   G   C   F   S   H   Q

          873         882         891         900         909         918
TGG TTA GTT AGC ACA ATG GTT GTA TAC ATA CCA ACT TAC ATC AGC TCT GTG TAC
W   L   V   S   T   M   V   V   Y   I   P   T   Y   I   S   S   V   Y

          927         936         945         954         963         972
CAT GTT AAC ATC AGA GAC AAT GGA CTT CTA TCT GCC CTT CCT TTT ATT GTT GCC
H   V   N   I   R   D   N   G   L   L   S   A   L   P   F   I   V   A

          981         990         999        1008        1017        1026
TGG GTC ATA GGC ATG GTG GGA GGC TAT CTG GCA GAT TTC CTT CTA ACC AAA AAG
W   V   I   G   M   V   G   G   Y   L   A   D   F   L   L   T   K   K

         1035        1044        1053        1062        1071        1080
TTT AGA CTC ATC ACT GTG AGG AAA ATT GCC ACA ATT TTA GGA AGT CTC CCC TCT
F   R   L   I   T   V   R   K   I   A   T   I   L   G   S   L   P   S

         1089        1098        1107        1116        1125        1134
TCA GCA CTC ATT GTG TCT CTG CCT TAC CTC AAT TCC GGC TAT ATC ACA GCA ACT
S   A   L   I   V   S   L   P   Y   L   N   S   G   Y   I   T   A   T

         1143        1152        1161        1170        1179        1188
GCC TTG CTG ACG CTC TCT TGC GGA TTA AGC ACA TTG TGT CAG TCA GGG ATT TAT
A   L   L   T   L   S   C   G   L   S   T   L   C   Q   S   G   I   Y

         1197        1206        1215        1224        1233        1242
ATC AAT GTC TTA GAT ATT GCT CCA AGG TAT TCC AGT TTT CTC ATG GGA GCA TCA
I   N   V   L   D   I   A   P   R   Y   S   S   F   L   M   G   A   S

         1251        1260        1269        1278        1287        1296
AGA GGA TTT TCG AGC ATA GCA CCT GTC ATT GTA CCC ACT GTC AGC GGA TTT CTT
R   G   F   S   S   I   A   P   V   I   V   P   T   V   S   G   F   L

         1305        1314        1323        1332        1341        1350
CTT AGT CAG GAC CCT GAG TTT GGG TGG AGG AAT GTC TTC TTC TTG CTG TTT GCC
L   S   Q   D   P   E   F   G   W   R   N   V   F   F   L   L   F   A

         1359        1368        1377        1386        1395        1404
GTT AAC CTG TTA GGA CTA CTC TTC TAC CTC ATA TTT GGA GAA GCA GAT GTC CAA
V   N   L   L   G   L   L   F   Y   L   I   F   G   E   A   D   V   Q
```

FIGURE 1B

```
       1413         1422         1431         1440         1449         1458
GAA TGG GCT AAA GAG AGA AAA CTC ACT CGT TTA TGA AGT TAT CCC ACC TTG GAT
E   W   A   K   E   R   K   L   T   R   L

       1467         1476         1485         1494         1503         1512
GGA AAA GTC ATT AGG CAC CGT ATT GCA TAA AAT AGA AGG CTT CCG TGA TGA AAA

       1521         1530         1539         1548         1557         1566
TAC CAG TGA AAA GAT TTT TTT TTC CTG TGG CTC TTT TCA ATT ATG AGA TCA GTT

       1575         1584         1593         1602         1611         1620
CAT TAT TTT ATT CAG ACT TTT TTT TGA GAG AAA TGT AAG ATG AAT AAA AAT TCA

       1629         1638
AAT AAA ATG ATA ACT AAG AAT GC 3'
```


FIGURE 1C

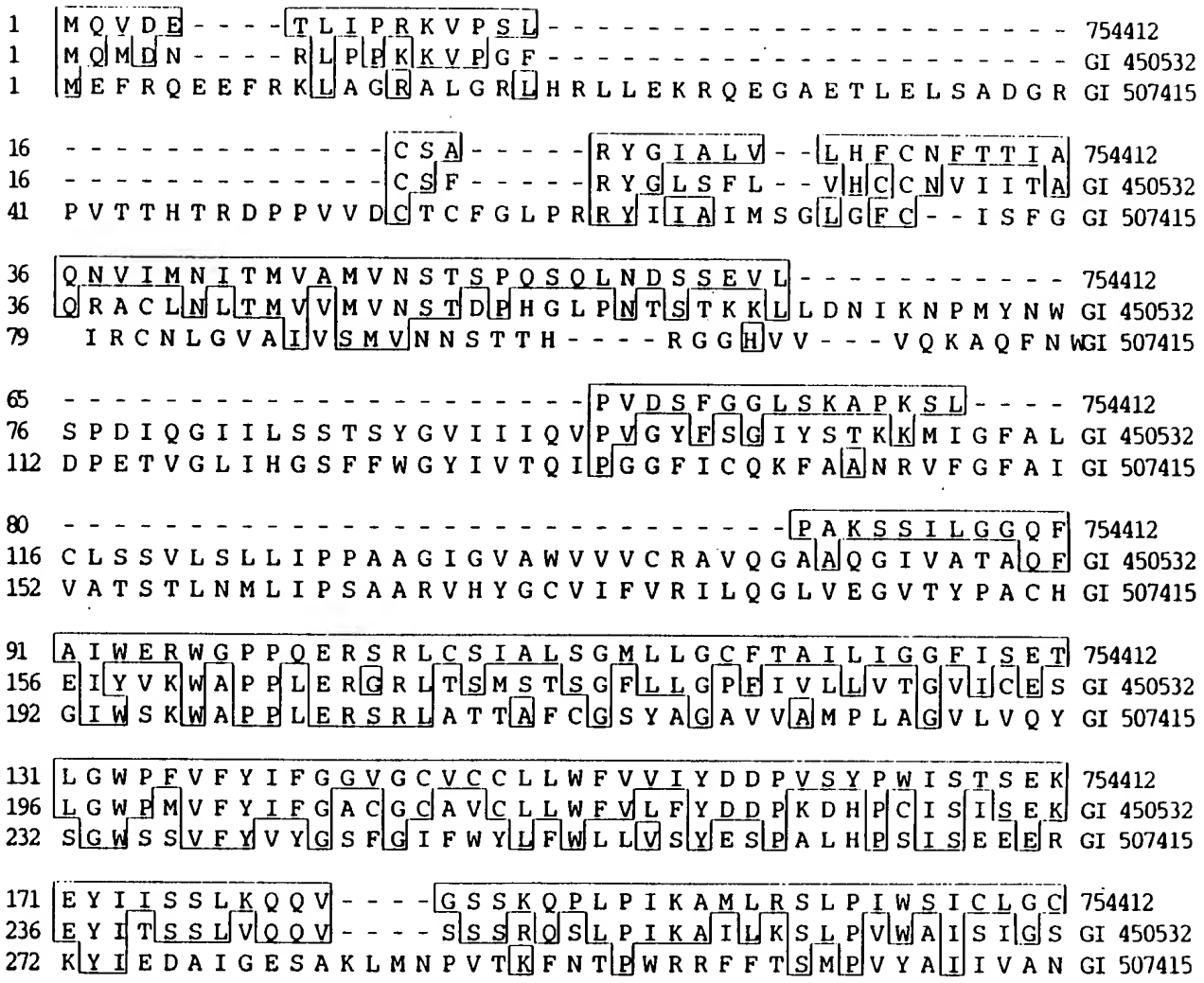

FIGURE 2A

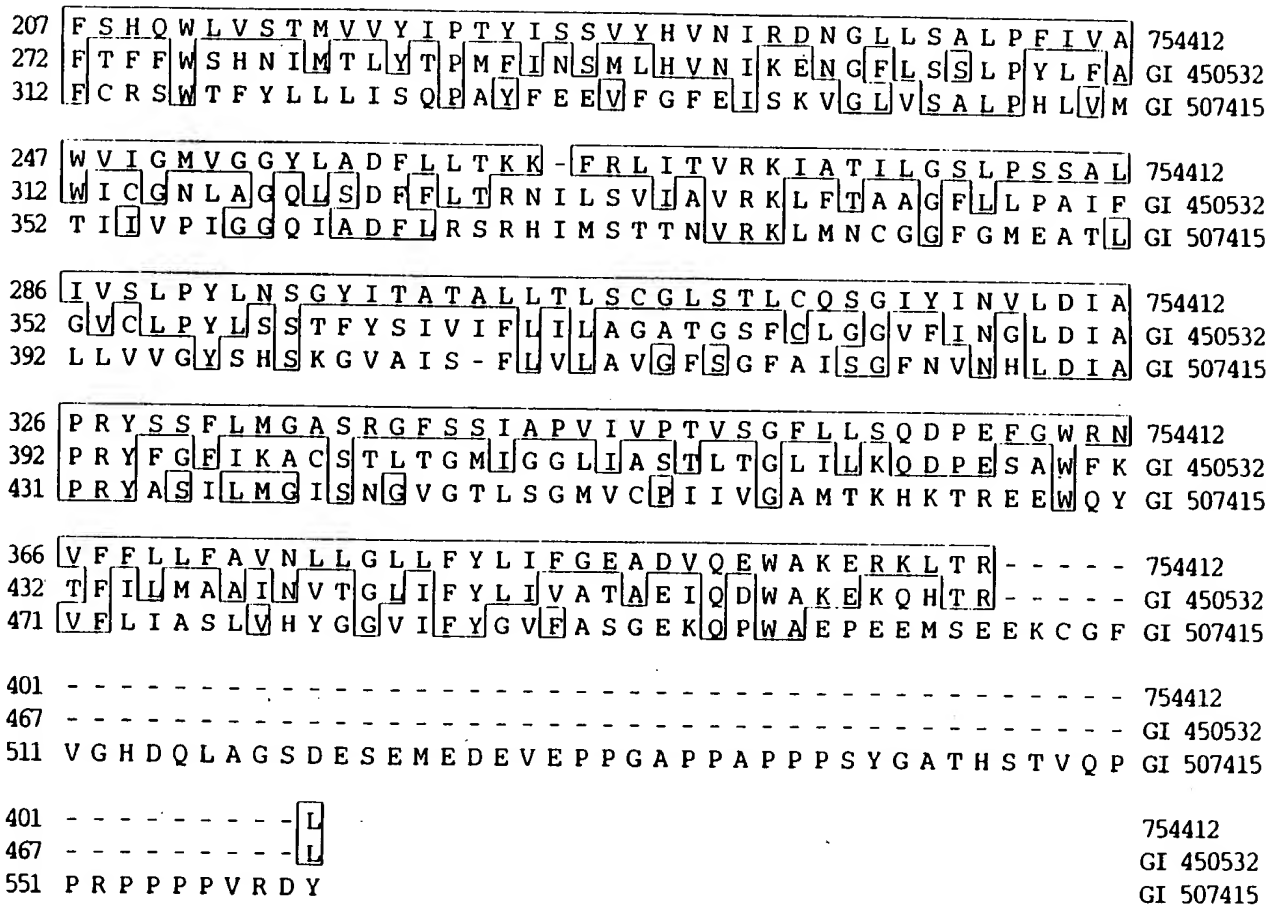

FIGURE 2B

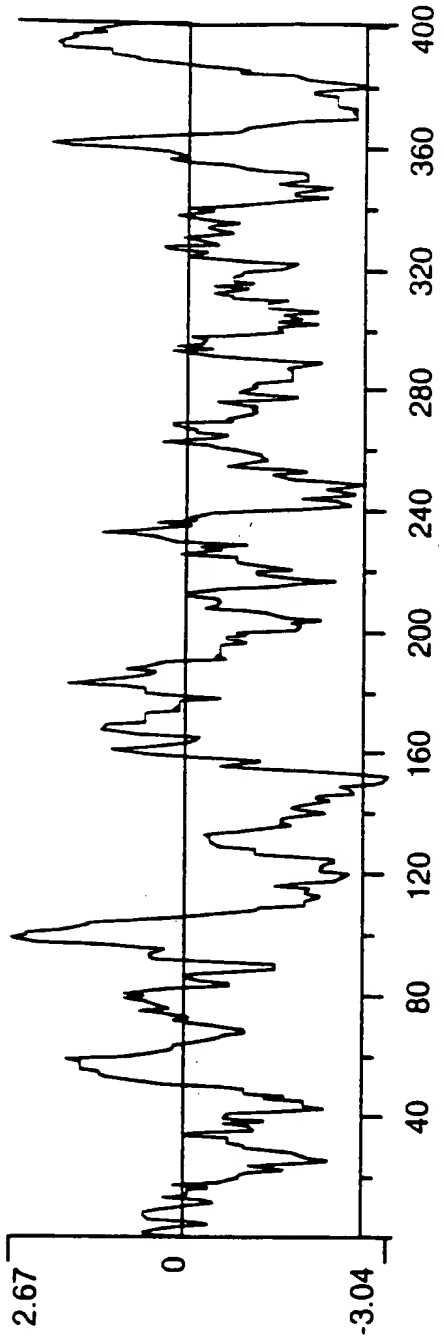

FIGURE 3A

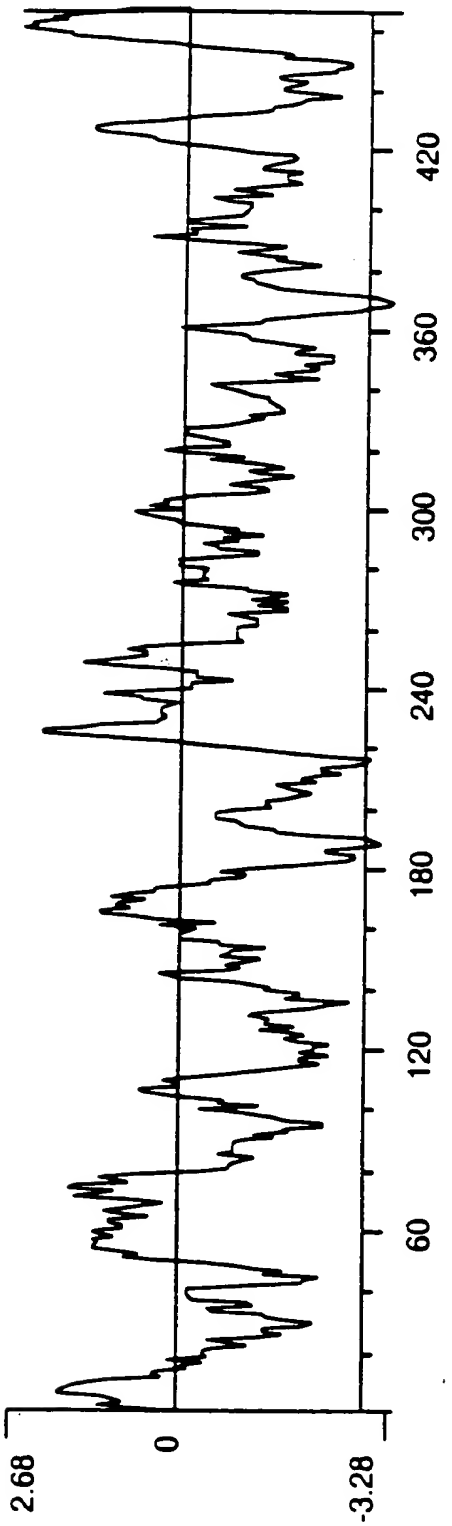

FIGURE 3B

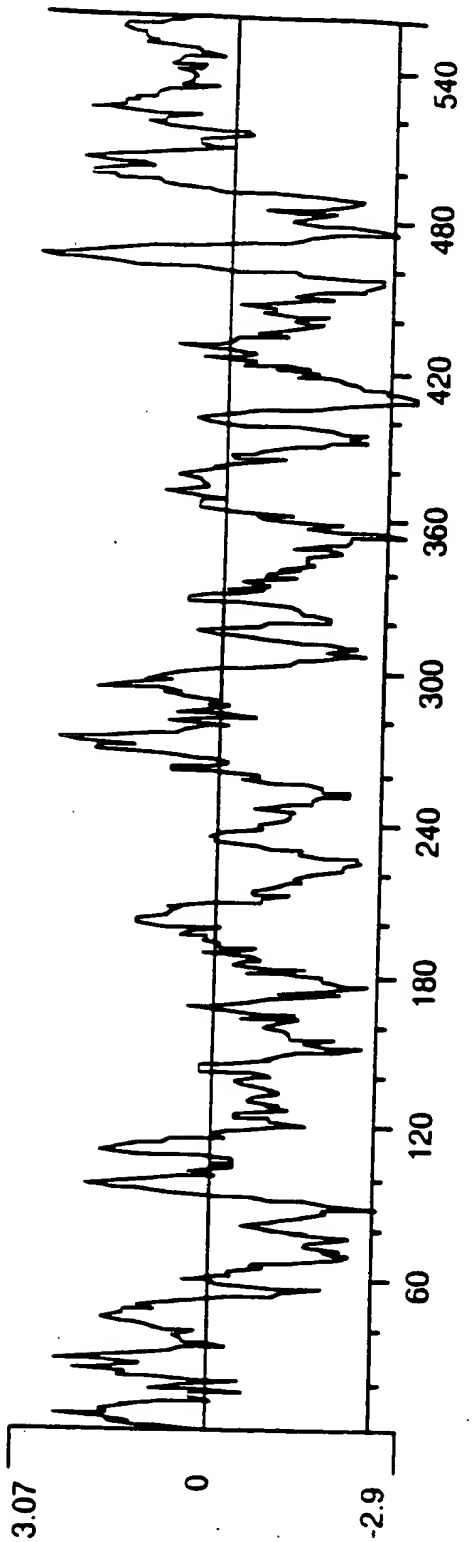

FIGURE 3C